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CoE 197S 2s2021 ME 8 Activity 1: RUNNING CONTAINERS

I. PULLING AN IMAGE

1. // Installation took at least three restarts, thought I was doing something wrong since Docker Desktop kept on //stopping. Finally felt relief after more than a day stuck in ME7.

2. Numbering is based on README.md

3. //Download progression with the lengthening arrow is a nice touch.

```
C:\Users\Richard Mendoza>docker pull ubuntu:16.10
16.10: Pulling from library/ubuntu
dca7be20e546: Pull complete
40bca54f5968: Pull complete
61464f23390e: Pull complete
d99f0bcd5dc8: Pull complete
120db6f90955: Pull complete
Digest: sha256:8dc9652808dc091400d7d5983949043a9f9c7132b15c14814275d25f94bca18a
Status: Downloaded newer image for ubuntu:16.10
docker.io/library/ubuntu:16.10

C:\Users\Richard Mendoza>
```

```
C:\Users\Richard Mendoza>docker images
REPOSITORY     TAG        IMAGE ID        CREATED        SIZE
ubuntu         16.04      b6f507652425    9 months ago   135MB
ubuntu         16.10      7d3f705d307c    4 years ago    107MB

C:\Users\Richard Mendoza>
```

4.

```
C:\Users\Richard Mendoza>docker rmi 7d3f705d307c
Untagged: ubuntu:16.10
Untagged: ubuntu@sha256:8dc9652808dc091400d7d5983949043a9f9c7132b15c14814275d25f94bca18a
Deleted: sha256:7d3f705d307c7c225398e04d4c4f8512f64eb8a65959a1fb4514dfde18a047e7
Deleted: sha256:d9db289b9342d9617596cd6ee3bba988629e24d9afa5db4e4b0e4e491c65007d
Deleted: sha256:a87725e8597b97f2399bc3aa50b0e2eec903b8ce19055668d3befb012918205c
Deleted: sha256:38cf10a2801529348366953e9b933d3524360dedc91d3e4d5d7f941da0c973c9
Deleted: sha256:61172966249d43026dbd017eec3a9575e37bddf8a269a9f09ecb559d7bfe7fef
Deleted: sha256:57145c01eb80040fdd0a24cde20af4788605b49593188d4f7efab099af89a08e
```

```
C:\Users\Richard Mendoza>docker images
REPOSITORY     TAG        IMAGE ID        CREATED        SIZE
ubuntu         16.04      b6f507652425    9 months ago   135MB
```

```
C:\Users\Richard Mendoza>docker rmi ubuntu:16.04
Untagged: ubuntu:16.04
Untagged: ubuntu@sha256:20858ebbc96215d6c3c574f781133ebffdc7c18d98af4f294cc4c04871a6fe61
Deleted: sha256:b6f50765242581c887ff1acc2511fa2d885c52d8fb3ac8c4bba131fd86567f2e
Deleted: sha256:0214f4b057d78b44fd12702828152f67c0ce115f9346acc63acdf997cab7e7c8
Deleted: sha256:1b9d0485372c5562fa614d5b35766f6c442539bcee9825a6e90d1158c3299a61
Deleted: sha256:3c0f34be6eb98057c607b9080237cce0be0b86f52d51ba620dc018a3d421baea
Deleted: sha256:be96a3f634de79f523f07c7e4e0216c28af45eb5776e7a6238a2392f71e01069

C:\Users\Richard Mendoza>docker images
REPOSITORY     TAG        IMAGE ID    CREATED    SIZE

C:\Users\Richard Mendoza>
```

II. RUNNING OUR CONTAINER

1. After pulling 16.04 again: Perhaps quotations marks are needed in Mac but not in Windows.

```
C:\Users\Richard Mendoza>docker run ubuntu:16.04 /bin/echo 'Hello world!'
'Hello world!'

C:\Users\Richard Mendoza>docker run ubuntu:16.04 /bin/echo Hello world!
Hello world!

C:\Users\Richard Mendoza>
```

2. docker ps vs. docker ps -a:

```
C:\Users\Richard Mendoza>docker ps
CONTAINER ID    IMAGE       COMMAND      CREATED      STATUS       PORTS      NAMES

C:\Users\Richard Mendoza>
```

```
C:\Users\Richard Mendoza>docker ps -a
CONTAINER ID    IMAGE          COMMAND                 CREATED         STATUS                  PORTS       NAMES
b6807d9ea8b3    ubuntu:16.04   "/bin/echo Hello wor…"  2 minutes ago   Exited (0) 2 minutes ago            funny_hoover
db6cdfb97823    ubuntu:16.04   "/bin/echo 'Hello wo…"  2 minutes ago   Exited (0) 2 minutes ago            modest_tesla
```

3. Based on forums: by default, directories where everyone, outside of the owner, has write permissions are shown with a green background.

```
C:\Users\Richard Mendoza>docker run ubuntu:16.04 /bin/bash

C:\Users\Richard Mendoza>docker ps -a
CONTAINER ID    IMAGE          COMMAND                 CREATED          STATUS                    PORTS       NAMES
b7310fa5d393    ubuntu:16.04   "/bin/bash"             26 seconds ago   Exited (0) 25 seconds ago             xenodochial_gates
b6807d9ea8b3    ubuntu:16.04   "/bin/echo Hello wor…"  4 minutes ago    Exited (0) 4 minutes ago              funny_hoover
db6cdfb97823    ubuntu:16.04   "/bin/echo 'Hello wo…"  4 minutes ago    Exited (0) 4 minutes ago              modest_tesla

C:\Users\Richard Mendoza>

C:\Users\Richard Mendoza>docker run -it ubuntu:16.04 /bin/bash
root@28f771dcd7a2:/# pwd
/
root@28f771dcd7a2:/# ls
bin  boot  dev  etc  home  lib  lib64  media  mnt  opt  proc  root  run  sbin  srv  sys  tmp  usr  var
root@28f771dcd7a2:/# exit
exit

C:\Users\Richard Mendoza>
```

4. // I really prayed that my laptop won't sleep after I press Enter. I therefore thought that I will be typing faster //if it was not my laptop on the line

```
C:\Users\Richard Mendoza>docker run -d ubuntu:16.04 /bin/sleep 3600
f58f294166e6302c646a3f50200397bdec9a3fe79753e621d901ee85cfccd30a
```

```
C:\Users\Richard Mendoza>docker ps
CONTAINER ID    IMAGE          COMMAND            CREATED          STATUS          PORTS       NAMES
f58f294166e6    ubuntu:16.04   "/bin/sleep 3600"  15 seconds ago   Up 14 seconds               great_curran

C:\Users\Richard Mendoza>
```

5. Reattach to background container:

```
C:\Users\Richard Mendoza>docker exec -it f58 /bin/bash
root@f58f294166e6:/# ps aux
USER        PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
root          1  0.0  0.0   4376   700 ?        Ss   07:50   0:00 /bin/sleep 3600
root          7  0.5  0.0  18236  3220 pts/0    Ss   07:57   0:00 /bin/bash
root         17  0.0  0.0  34424  2812 pts/0    R+   07:57   0:00 ps aux
root@f58f294166e6:/# exit
exit

C:\Users\Richard Mendoza>docker ps
CONTAINER ID   IMAGE          COMMAND            CREATED         STATUS         PORTS      NAMES
f58f294166e6   ubuntu:16.04   "/bin/sleep 3600"  7 minutes ago   Up 7 minutes              great_curran

C:\Users\Richard Mendoza>
```

6. Should always clean containers after they were stopped.
// First and second images are not shown together since cmd jumped a lot of lines after the first image.

```
C:\Users\Richard Mendoza>docker stop f58
f58
```

```
C:\Users\Richard Mendoza>docker ps -a
CONTAINER ID   IMAGE          COMMAND                 CREATED          STATUS                       PORTS      NAMES
f58f294166e6   ubuntu:16.04   "/bin/sleep 3600"       11 minutes ago   Exited (137) 13 seconds ago             great_curran
28f771dcd7a2   ubuntu:16.04   "/bin/bash"             20 minutes ago   Exited (0) 19 minutes ago               dazzling_pare
21248575c1d0   ubuntu:16.04   "/bin/bash"             20 minutes ago   Exited (0) 20 minutes ago               ecstatic_dirac
b7310fa5d393   ubuntu:16.04   "/bin/bash"             23 minutes ago   Exited (0) 23 minutes ago               xenodochial_gates
b6807d9ea8b3   ubuntu:16.04   "/bin/echo Hello wor…"  27 minutes ago   Exited (0) 27 minutes ago               funny_hoover
db6cdfb97823   ubuntu:16.04   "/bin/echo 'Hello wo…"  27 minutes ago   Exited (0) 27 minutes ago               modest_tesla

C:\Users\Richard Mendoza>
```

7. //Just decided to remove individually since I can not find the Windows counterpart for '$' and I'm running
//out of time.

```
C:\Users\Richard Mendoza>docker rm $(docker ps -a -q)
unknown shorthand flag: 'a' in -a
See 'docker rm --help'.

C:\Users\Richard Mendoza>docker rm 28f
28f

C:\Users\Richard Mendoza>docker rm 212
212

C:\Users\Richard Mendoza>docker rm b73
b73

C:\Users\Richard Mendoza>docker rm b68
b68

C:\Users\Richard Mendoza>docker rm db6
db6

C:\Users\Richard Mendoza>docker ps -a
CONTAINER ID   IMAGE      COMMAND     CREATED     STATUS      PORTS      NAMES

C:\Users\Richard Mendoza>
```

```
C:\Users\Richard Mendoza>docker run --rm ubuntu:16.04 /bin/echo 'Hello and goodbye!'
'Hello and goodbye!'

C:\Users\Richard Mendoza>docker ps -a
CONTAINER ID   IMAGE      COMMAND     CREATED     STATUS      PORTS      NAMES

C:\Users\Richard Mendoza>
```